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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/760,594

01/20/2004

Daishi Suzuki

42530-6400

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EXAMINER

SHAPIRO, JEFFERY A

ART UNIT

PAPER NUMBER

3653

MAIL DATE

DELIVERY MODE

05/13/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/760,594	Applicant(s) SUZUKI, DAISHI	
	Examiner JEFFREY A. SHAPIRO	Art Unit 3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/12/09 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 5, 6 and 9-12 rejected under 35 U.S.C. 103(a) as being unpatentable over Ma et al (US 6,486,464 B1) in view of Ashurst et al (US 2004/0233618 A1).

4. Regarding Claims 1-3, 5, 6 and 9, Ma discloses a document verification system (30), as illustrated in figure 2, having a first transmitting sensor having a first emitter (34), a first radiation receiving section (44) on a second side, and a first reflecting sensor (40) having a second radiation reflection receiving section on the first side of the document passageway.

Further regarding Claims 1-3, 5, 6 and 9, Ma discloses a document verification system (170), as illustrated in figure 11, having emitters (172, 174) each facing

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respective radiation sensors (176, 178), thus forming emitter/sensor pairs, each pair located on an axis that is slanted with respect to the horizontal as represented by document (179). Note that each axis intersects in a "criss-cross" fashion, as illustrated in figure 11.

Further regarding Claims 1-3, 5, 6, 9 and 11, Ma additionally discloses a control circuit as illustrated in figure 3 that is driven by pulsed signal (100) as illustrated in figure 4, which causes the synchronized activation of the LED emitters for the purpose of preventing interference between emitters and the various radiation receivers, i.e., sensors.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have added a second radiation receiver to an emitter/sensor pair, said second radiation receiver located on the same side as the emitter, for the purpose of capturing radiation reflected from the document and towards the first side.

One ordinarily skilled in the art would have recognized that from Ma's figure 2 that adding such a second sensor on the same side as the emitter of a pair as illustrated in figure 11 would capture such reflected radiation in that embodiment.

Further regarding Claims 1 and 9, Ma does not expressly disclose, but Ashurst discloses a projection into the note path to prevent ambient light entering the validator, as discussed at Ashurst Claim 64.

Ashurst also discloses a starting sensor unit positioned adjacent the banknote receiving opening.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have included a projection in Ma's notepath, as taught by Ashurst, for the purpose of preventing ambient light from entering the validator and ruining the validation sensor readings. In addition, it would have also been obvious to include a starting sensor, as taught by Ashurst, for the purpose of sensing the input of a bill and to therefore start the validator. Additionally, it would have been obvious to make such a sensor a light based sensor as this is one of several sensors known in the art for sensing an incoming sheet or bill and because all of the other sensors mentioned in Ashurst's machine are light based, which lowers maintenance costs by maintaining a single type of sensor, as is readily apparent to one of ordinary skill in the art.

Regarding Claim 10, Ma discloses each emitter emitting radiation of different frequencies at col. 14, lines 46-50.

Regarding Claim 12, Ma discloses a "comparator component" (168) which compares the sensed values with "threshold" values stored in memory. See col. 11, lines 40-57.

5. Claims 7 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ma et al (US 6,486,464 B1) in view of Ashurst et al (US 2004/0233618 A1) and further in view of Chen (US 2002/0033968 A1).

Ma discloses the device described above.

6. Regarding Claims 7 and 13, Ma does not expressly disclose, but Chen discloses using a standard calibration paper to calibrate a light scanning device, such as

disclosed by Ma, for the purpose of improving the quality of the scan in the areas of color, brightness and contrast. See Chen at abstract and paragraphs 8 and 9.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have used a standard calibration paper in Ma's bill scanning device for the purpose of calibrating the light emitters, i.e., light scanners and therefore increase the quality of the scan in the areas of color, brightness and contrast.

Regarding Claim 14, official notice is taken that it would have been obvious to incorporate an "initial setting button" for the purpose of calibrating the light sensors/scanners of Ma's light scanning device.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ma et al (US 6,486,464 B1) in view of Ashurst et al (US 2004/0233618 A1) and further in view of Allot (DE 2921688 A).

Ma discloses the device described above.

8. Regarding Claim 8, Ma does not expressly disclose, but Allot discloses using document stabilizer comprising a transportation channel having three separate guide belts, as illustrated at figure 1, for the purpose of preventing creasing. See also Allot title and abstract provided in the Derwent English Translation.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have used a document stabilization mechanism in Ma's bill scanning device for the purpose of removing creases in the bills before they get to the light sensors and therefore increase the quality of the scan.

Response to Arguments

9. Applicant's arguments with respect to Claims 1-3 and 5-14 have been considered but are moot in view of the new ground(s) of rejection.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFREY A. SHAPIRO whose telephone number is (571)272-6943. The examiner can normally be reached on Monday-Friday, 9:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick H. Mackey can be reached on (571)272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeffrey A. Shapiro/
Examiner, Art Unit 3653

May 11, 2009